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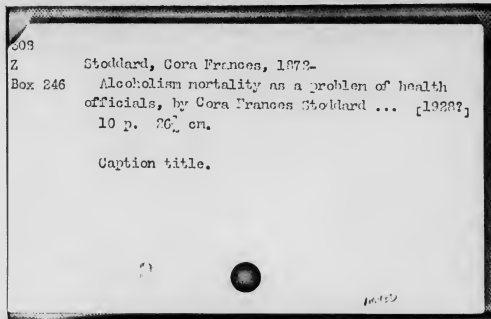
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Alcoholism Mortality as a Problem of Health Officials

By CORA FRANCES STODDARD

[The alcoholism mortality statistics of states used in this article are furnished by the United States Census Bureau. Statistics of cities came from health departments of the cities. The population statistics of states employed are from the United States Statistical Abstract, 1926, p. 8.]

THE discussion of alcoholism mortality by the New York State Health Commissioner in the *New York State* (Jan. 18, 1928)* very properly called attention to the fact that health authorities are not giving this cause of death the attention by preventive means which would be given any other cause of death whose rate was rising.

In this respect, the statement is significant because it indicates recognition of death loss by alcohol, which rarely received attention from public health officials before prohibition. From 1901 to 1917, the alcoholism death rate averaged 56 per million population, or about the rate of 1916 (58 per million). Under national prohibition the highest rate in any year (1926) has been 39 per million. The smaller proportion of people of the United States who now die of alcoholism are no "deader" than those who succumbed between 1901 and 1917, so that honest consideration of this health aspect of the alcohol problem by health officials anxious to prevent loss of life is to be welcomed as an evidence of keener appreciation of the importance of this loss of life than they formerly showed.

*In the *New York Sun*, January 18, 1928, was published an interview with Dr. Mathias Nicoll, State Health Commissioner of New York, in which he stated that an effort to have alcoholism considered as a health question to be solved on a scientific basis was checked by political considerations at the 1927 Washington conference of health officials. Because of this situation he would not renew this effort, although, he stated, "anything else that was taking such a toll of human life would be at once the subject of a general health policy. This ought to be. The figures of death are mounting continuously, and there are probably several times as many deaths as are reported."

The statement declared that the situation of a growing number of alcoholic deaths was just as bad in dry states as in wet, and in some cases worse; that eventually state officials and legislators would have to ignore the political aspects and act as a duty to the public. New York legislators approached concerning the matter agreed that something should be done, but thought the question "filled with political dynamite"; and the reaction among the "wets" was that while they had been fighting against a state enforcement act, one of the first demands that would be made upon them would be the passage of such a measure as a solution of the problem. "Others insisted that it had not solved the problem in states where there was an enforcement law," and that "state health officers should be empowered to meet for general discussion of the subject and then give the necessary state aid to handle it in the same manner as are epidemics of some disease."

Some Background Facts. But in directing attention to the rise of the alcoholism death rate since the low point of 1920, it is easy to cause misunderstanding of the real situation unless certain other facts are also stated. Unfortunately, discussion of this matter by some health officials has seemed to court turning it into a political question when they have referred solely to the rise in the rate in the prohibition years without mentioning these other facts. Some of these facts are the following:

1. There were about 16,000 fewer alcoholism deaths in the first seven prohibition years than there would have been had there prevailed the average pre-prohibition rate of the years 1912-1917. (Table I.)

2. In 1926, the latest year for which United States statistics are available, there were fewer actual deaths from alcoholism in a registration area of 105,000,000 people than there were in 1916 from 71,000,000 people.

3. As already stated, in the last seventeen normal pre-prohibition years, the average alcoholism death rate was 56 per million population; in the last eight of those years it was 52; in 1926, the rate was 39, despite an acknowledged rise since 1920.

4. It is true that not all alcoholism deaths are reported. But they never were. The probability is that a larger percentage is reported now than before prohibition when, in many places, to quote a Chicago official connected with the coroner's office, "It was political suicide prior to the passage of the Volstead Act for an office holder in any way to show the evil of drinking. Now, the deputy coroner in taking evidence can go into the history of alcoholism without fear of criticism."

This may be part of the reason for an increase in the reported death rates from alcoholism since 1920.

It suggests, also, that "political" influence in this health problem is not new. *Where is Alcoholism Worst?* If there is to be a campaign for reducing alcoholism, it is important to know the strategic points where it is most menacing and increasing fastest. What, to use a familiar phrase, are the serious "centers of infection"? They are the former wet states and the great cities. Certain facts indicate this:

1. The joint alcoholism death rate in 1926 of 15 former non-prohibition states was 4.8; in 27 former prohibition states, it was 2.5 per 100,000 population.

These former non-prohibition states contained nearly 54 of each 100 people of the registration area; they furnished 67 of each 100 alcoholic deaths.

2. There were 23 states in 1926 which had less than 50 alcoholic deaths each. Their total population was about two and one-half times that of New York state, but they furnished a total of only 545 deaths to New York's 788. Twenty of these states had adopted state prohibition before the Eighteenth Amendment came into effect.

Fourteen of the twenty-three states had fewer than 25 alcoholic deaths each. Their combined population was about equal to that of New York. They reported 233 deaths; New York, 788.

All of the fourteen were prohibition states except two (Vermont and Delaware, together furnishing only 25 alcoholic deaths).

3. *New York and Maryland.* These two states contain about 12 per cent of the population of the registration area, but furnished 22 per cent of the alcoholic dead in 1926. New York is especially responsible; containing 10 per cent of the registration area population, it contributed over 19 per cent of the alcoholic dead. New York City, with about 5 per cent of the aforesaid population, contributed over 18 per cent of the alcoholism deaths in the United States in 1926. Wyoming and Rhode Island also have an excessive disproportion between population and alcoholism, but furnished only 70 actual deaths in 1926.

It is no wonder that Dr. Nicoll found New York state "wet" politicians chary about taking up the question of checking alcoholism mortality for fear it would increase the demand for a state prohibition enforcement law.

4. There were 14 states in 1926 whose alcoholism death rate was above the national average. Ten of them are former non-prohibition states. (Table II.)

There were 28 states at or below the average rate; 23 of them former prohibition states.

There were 27 former prohibition states in the registration area in 1926; 11 of them had less than half the national alcoholism death rate.

Of the 4 prohibition states exceeding the average rate, 3 (Washington, Michigan, and Florida) are at points especially accessible to smuggled liquor, while the first two contain two of the twenty largest cities in the United States (Seattle and Detroit).

It is evident that in general the alcoholism mortality problem is most serious in the former wet states; is below the average in the former prohibition states.

5. *The Great Cities.* In 1926, twenty of the largest cities in the registration area contained about 20 of each 100 people in the United States. But they furnished about 45 of each 100 alcoholism deaths.*

It is evident that the largest part of the alcoholism problem centers in the former wet states and in the large cities, some of which are in former dry states. Michigan and Washington, for instance, mentioned above among the states having an alcoholic death rate above the national rate, are undoubtedly affected by their large cities, Detroit and Seattle, to both which Canadian liquor is easy of access.

Where Does the Alcoholism Death Rate Rise Most Rapidly? Dr. Nicoll, of New York, drew attention again to the fact, which has been a stock anti-prohibition argument, that the alcoholism death rate has been rising since 1920. It is true. It is not a matter for pride. It may very well be given serious consideration by every one who believes that prohibition is designed to be a measure protective of public health.

But if activity of health officials is to be directed intelligently at the problem, where is this death rate rising most seriously?

*For more than a decade the writer has obtained from health officials of 20 of the 24 largest cities in the United States (i.e., those containing over 300,000 population) their annual statistics of deaths from alcoholism, which are now thus compiled for seventeen consecutive years, 1910-1926. Data for the whole period are not obtainable from the missing four cities. (See "Alcoholism Mortality in the United States," *Scientific Temperance Journal*, Summer, 1927.)

The answer is: In general, in the former non-prohibition states. Their joint alcoholism death rate per 100,000 population in 1920 was 1.08; in 1926, it was 4.8. Every one of these states except four (Vermont, Mass., Louisiana and Calif.) had more than the average percentage of increase from 1920 to 1926. (Table III.)

The alcoholic death rate of the twenty former prohibition states in the prohibition area for the whole period jointly increased from 1.02 per 100,000 population in 1920 to 2.6 in 1926. Every one of these increased less than the average for the registration area (Table III). In nine states where state prohibition had been in effect for at least four years before national prohibition, the rate of increase is smallest, from 0.8 in 1920 to 1.5 in 1926. The twelve states of the U. S. registration area whose individual alcoholism death rates increased since 1920 more than that of the nation were Maryland, Missouri, Illinois, New York, Rhode Island, New Jersey, Minnesota, Delaware, Connecticut, Pennsylvania, Wisconsin, and Kentucky. None of these had state prohibition laws when the Eighteenth Amendment went into effect. Most of them are still recognized centers of pro-liquor activity. Kentucky was the lowest of the group, barely exceeding the average rate of increase, and is the one state of the group which has adopted a state constitutional prohibition amendment, but it did so after the Eighteenth Amendment was ratified.

Maryland, one of the two states having no state enforcement law, leads this group with an increase in the alcoholism death rate since 1920 nearly four times the average rate of increase. New York, the other state lacking a state enforcement law, and Illinois, dominated by wet Chicago, had about double the average rate of increase.

Twenty-three states increased from 1920 to 1926 at less than the average rate of the registration area. All but four of these were former prohibition states. (Table III.)

Eleven states showed less than half the average percentage of increase over 1920; all of them prohibition states. Six of these states showed only one-third or less of the average rate of increase. No former non-prohibition states were in these two groups. Table III.

The former wet states are either taking more pains now to record their alcoholism mortality, or else they have showed a worse reaction since 1920 than most of the prohibition states in the registration area.

THE REGISTRATION STATES OF 1910

Other evidence as to where the alcoholism mortality problem is most serious is to be found in the "Registration States of 1910." It points again to the same sections previously noted. There are 22 states for which statistics are complete from 1910 to 1926. Their joint alcoholism death rate is available and runs somewhat higher than that for the whole registration area, which probably includes a smaller proportion of urban population. This 1910 Registration States' rate also is not affected by the adding of new states many of which of recent years have been former prohibition states with lower alcoholism death rates.

Table IV presents these states in 4 years; 1910, when only two states had prohibition; 1916, about the beginning of the increase in prohibition states and

including four prohibition states; 1920, the first year of national prohibition; and 1926, the last year for which data are available.

The number of states having excessive alcoholism mortality decreased from 11 in 1910 to 8 in 1916 and 1920 and to only 6 in 1926. Only one of these 6 in 1926 is a former prohibition state. Rhode Island and Massachusetts appear in the excessive group at all four periods; New York in three of them and at the average rate in 1920. Maryland, Pennsylvania and Michigan have achieved the unhappy distinction of rising from rates below the average to this excessive group. Michigan is the only prohibition state in this group in 1926, but ranks lowest in it, by only 0.1 above the average. It is apparent from all the statistics that the alcoholism mortality situation in Michigan as a prohibition state is not satisfactory owing perhaps to its large city, Detroit, on the Canadian border. The six states in this excessive group in 1920 carried 30 per cent of the registration area population, and produced 45 per cent of the alcoholic dead reported.

What of the prohibition states? (Table IV.) In 1910 there were but 2 among the registration states, Maine and the cities of North Carolina, but their rates were the lowest on the list.

In 1916, there were four prohibition states in the group, all ranking among the lowest six of the list. Again two prohibition states had the lowest rate.

In 1920, rates in all states greatly decreased with national prohibition. In some of the former non-prohibition states, the fall was so especially sharp that they ranked lower in 1920 than several of the prohibition states where a change had already taken place. Nevertheless, of the now 11 states under state prohibition, 6 were at the average rate or below it, and again two prohibition states were at the bottom of the list, one of them, Colorado, having been near the top in 1910.

In 1926, as already noted, only one prohibition state appears among the six with excessive rates; 10 are below the average and 6 had the lowest rank of the whole 22 states of the group.

None of the prohibition states now below the average rate have as high a rate as in 1910 or in 1916 except for a small increase over 1916 in North Carolina; also in Washington where 1916 was the first state prohibition year. Here we have, perhaps, the combined effort of a large city and that accessible to liquor from the Canadian provinces.

The rise since 1920 has been faster in the twenty big cities than in the remainder of the nation. In the first year after the Eighteenth Amendment went into effect (1921) the alcoholism death rate both in these big cities and in the rest of the population increased between 40 and 50 per cent. But since 1921 the combined rate of the 20 cities rose from 2.7 in 1921 to 8.46 in 1926 (trebling). In the rest of the country, the rate rose only from 1.5 in 1921 to 2.7 in 1926 (not quite doubling).

It appears, therefore, that both in alcoholism death rates and in death rate increase, the problem centers chiefly in former wet states and in the great cities.

Cirrhosis of the Liver. Liver cirrhosis death rates are commonly regarded indicative of the extent of chronic alcoholism, though not all cases are alcoholic. The physician recently given publicity in the daily press as saying that 65,000 alcoholic deaths had occurred under prohibition* had to include every reported death from cirrhosis of the liver in order to get this figure. Chicago at the present time reports almost one-fourth of its liver cirrhosis deaths as alcoholic. If this is at all accurate, it would reduce the aforesaid physician's story by about 30,000.

However that may be, there were 38,000 fewer deaths from cirrhosis of the liver in the first seven prohibition years than there would have been at the average pre-prohibition rate. (Table I.)

The liver cirrhosis death rate in the United States showed a downward trend beginning with 1912, but a sharp decline began with the war restrictions on liquor. The lowest point was reached with national prohibition in 1920 with a rate of 7.1 per 100,000. The average rate had been 13 in the pre-prohibition years 1910-1917.

In 1926 the rate was only 7.2 after some minor variations up and down since 1920, but it has never been higher under prohibition than 7.5. Sixteen states in the registration area had a lower rate in 1926 than in 1920; 17 had a lower rate than the average rate of the whole period 1920-1926; 21 states had the same rate or a rate lower than that of 1925.

In the 12 states showing a higher rate in 1926 than for the whole prohibition period the excess was small, and in several of these states the 1926 rate was lower than that of 1925.

The liver cirrhosis death rate, therefore, has remained practically stationary around the low level of 1920; it shows little if any indication of rising and some indications of declining further. The alcoholic factor has not all been "squeezed out" yet, as appears from Chicago's reports, but the relative stability of the liver cirrhosis death rate under prohibition suggests that there may have been in this period less of the steady heavy drinking leading to this chronic disease, while the alcoholism death-rates may reflect the result of acute alcoholism following drinking bouts. Thus there might easily be an increase of deaths from alcoholism coincident with a decrease in steady heavy drinking.

The Lives That Might Have Been Saved. Attention has already been called to the fact that there have been about 16,000 fewer deaths from direct alcoholism under prohibition than there would have been had pre-prohibition death rates prevailed.

It is equally important to realize that about 12,000 alcoholism deaths have occurred that need not, had the low rate of 1920 continued. (Table I.)

Sowing the Wind. The centers of serious increase, chiefly in the states known as "wet" strongholds and the great cities, are especially reaping in alcoholic dead the fruits of vociferous support of liquor and the liquor traffic which has encouraged indulgence in alcoholic beverages with the fatal consequences observed.

The former prohibition states have not escaped effect of this pro-liquor activity within and without their borders, but it is evident that the worst of the problem to be dealt with is considerably localized in certain states mostly previously wet states and great cities. If they do their part in dealing with it the rest of the country will follow.

What Health Departments Can Do. Fortunately it is in these states and cities, generally speaking, that health departments are best organized and have facilities for preventive educational work if they choose to use them. Unquestionably stronger enforcement of good state prohibition enforcement laws would help just as good enforcement of any sanitation law or regulation helps protect health. But this particular problem is one of education—the increasing of knowledge as to health dangers in using alcoholic liquors and the changing of public psychology toward the liquor habit and the would-be protective prohibition laws. This can be done by exactly the same kind of educational program that the health departments use in reducing other diseases. If the facilities and abilities of public health officials are once turned constructively to solving this problem they can do it, and can ultimately check and reduce to a still lower point American alcoholic mortality.

Unfortunately, eight years have been lost. It will take some time now to overcome the result of these eight years of not only negative neglect by health departments but of the positive ridicule of prohibition and of abstinence which has been popular in some quarters.

This ridicule and insistence on personal right to drink have encouraged drinking and have thus prevented the reaping of the full fruits of sobriety which 1920 showed was possible. Some young drinkers have been encouraged by this pro-alcohol social atmosphere to begin a drink habit that will unduly prolong the years of alcoholism death losses.

Some Things Needed. This preventive campaign by health officials should not waste itself on merely showing the unfavorable trend during the prohibition years without showing any of the actual gains made. Both sets of facts can be told,—the one as warning; the other, as incentive.

The health officials' preventive campaign must do more than warn against "bad" liquor. Every liquor buyer has confidence in "his" bootlegger. There were in pre-prohibition years higher alcoholism death-rates when over 175,000 saloons were openly selling supposedly "good" liquor.

Has not the time come for public health departments to assert themselves and go to the public with a constructive educational plan for preventing alcoholism, telling the people the health dangers in alcoholic liquors and encouraging sobriety, just as they proceed with educational plans for reducing tuberculosis, typhoid fever, cancer or venereal disease?

Incidentally, they might profitably strengthen the instruction legally required in the public schools as to the nature and effects of alcoholic beverages, and so help prevent the alcoholic indulgence that culminates in alcoholic mortality.

This alcoholism mortality problem is not now a question of more law. The

*Charles A. L. Reed, M.O. *Popular Science Monthly*, January, 1928.

law now offers protection. Action is up to the individual. It is a question of health depending on individual knowledge and choice. Nobody need die of alcoholism. It is more easily avoided than tuberculosis or smallpox, and within individual decision, as cancer certainly is not.

"The death rate from alcoholism," the Massachusetts Health Commissioner has sensibly said, "can be reduced most effectively if the public voluntarily reduces the drinking of intoxicating liquor."

No health commissioner needs to wait on legislation or conference with other states before entering on this effort to check alcoholism. States like New York and Maryland which have insisted on state independence in the matter of enforcement of the Eighteenth Amendment, which was designed to protect the public against alcoholism, have a chance now to demonstrate that they can through independent educational action by health officials, cut down their very seriously mounting alcoholism death rate.

TABLE I. ALCOHOLISM AS IT IS AND AS IT MIGHT HAVE BEEN UNDER NATIONAL PROHIBITION U. S. REGISTRATION AREA

	ACTUAL DEATHS	WHAT THERE WOULD HAVE BEEN AT THE AVERAGE PER-PROHIBITION RATE, 1912-1917	WHAT THERE MIGHT HAVE BEEN HAD 1920 RATE CONTINUED
1920	900	4,562	900
1921	1,611	4,624	889
1922	2,467	4,862	905
1923	3,142	5,957	972
1924	3,155	5,149	990
1925	3,694	5,261	1,031
1926	4,109	5,465	1,051
	19,084	35,080	6,738
		19,084	
	Gain 15,996		
	Loss by deliberate drinking and law violation		12,346
		Actual deaths	19,084
	CIRRHOSIS OF THE LIVER		
1920	6,241	11,406	6,241
1921	6,598	11,560	6,914
1922	6,977	12,156	6,839
1923	7,027	12,643	6,905
1924	7,344	12,873	7,031
1925	7,544	13,403	7,320
1926	7,591	13,672	7,407
	49,322	87,713	48,517
		49,322	
	Gain 38,391		
	Variation from what would have been at 1920 rate		805
		Actual deaths	49,322

TABLE II. ALCOHOLISM MORTALITY IN STATES OF REGISTRATION AREA

1910	1916	1920	1926
Mont. 14.7	Mont. 17.7	*Wash. 2.6	*Wyo. 8.9
Wash. 12.8	R. I. 8.9	*Fla. 1.9	Md. 7.6
Calif. 8.7	Conn. 8.2	*Mont. 1.8	R. I. 7.1
Conn. 7.7	N. Y. 8.2	Mass. 1.8	N. Y. 7.0
Col. 7.4	Mass. 8.2	*N. H. 1.8	*Fla. 6.8
D. C. 6.6	D. C. 7.8	*Ore. 1.6	Mass. 6.4
N. Y. 6.6	N. H. 7.8	*Mich. 1.5	Del. 5.0
Mass. 6.4	Mich. 7.1	Vt. 1.4	Pa. 5.0
N. J. 6.0	N. J. 6.6	R. I. 1.3	*Mich. 4.8
R. I. 5.9	Calif. 6.6	*Me. 1.3	Ill. 4.7
N. H. 5.8	Ohio 6.3	N. Y. 1.2	N. J. 4.6
	Penn. 6.0	Pa. 1.2	Conn. 4.2
		*Ohio 1.2	*Wash. 4.1
		*Utah 1.1	Minn. 4.0
		*D. C. 1.1	
		R. A. 3.9	*Mont. 3.9
*R. A. 5.4	R. A. 5.8	R. A. 1.0	Calif. 1.0
		Conn. 1.0	
		*N. C. 1.0	
Minn. 5.1	Wis. 5.6	Del. 0.9	*Idaho 3.8
Utah 4.8	Md. 5.5	N. J. 0.9	*Ohio 3.4
Md. 4.5	Utah 5.2	*Tenn. 0.9	Calif. 3.2
Wis. 4.4	Ind. 5.1	Wis. 0.8	Mo. 3.2
Pa. 4.1	Me. 5.1	Minn. 0.8	Wis. 3.2
Ohio 4.0	Minn. 4.3	*Va. 0.8	Vt. 3.1
Vt. 3.9	Mo. 3.2	Ill. 0.7	*N. H. 3.1
Mich. 3.6	Ky. 3.0	*Md. 0.7	*W. Va. 3.1
Ind. 3.3	*Colo. 3.0	*Colo. 0.7	*Ore. 2.9
*Me. 2.8	Vt. 2.8	*Kan. 0.7	*D. C. 2.5
*N. C. 2.8	*Wash. 2.8	*Ind. 0.5	*Utah 2.5
	Va. 2.7	La. 0.5	*Ariz. 2.5
	*Kan. 2.2	*Neb. 0.5	*Me. 2.5
	*N. C. 1.3	*S. C. 0.5	*Colo. 2.3
	S. C. 1.2	Mo. 0.4	*Iowa 2.1
		*Ky. 0.3	*N. D. 1.9
		*Miss. 0.3	La. 1.8
			*Ala. 1.8
			*Ind. 1.8
			*Kan. 1.8
			*N. C. 1.8
			*Ky. 1.5
			*Tenn. 1.5
			*Va. 1.5
			*Neb. 1.4
			*S. C. 1.1
			*Miss. 0.9

*State prohibition.
†Registration area

Table II differs from Table IV in that the latter includes only states all of which have been registration states in the whole period 1910-1926 or longer.

The registration area has been considerably enlarged by the addition of states from time to time, and many of these were states adopting prohibition. It contained in 1926 about 105,000,000 of the 117,000,000 population of the United States.

The sharp decrease in 1920 was so great in many of the previously wet states that some of the prohibition states which had previously had their rate lowered by state prohibition were less affected and so became a part of the list with the rate above the average.

By 1926, although there has been some increase again in all states, the addition to the registration area of several former prohibition states, three-quarters of which had a relatively low rate, and the special reaction in the former "wet" states gives the latter preponderance again in the group of excessive death rates.

In Tables II, III, and IV and in the text the District of Columbia for convenient brevity is referred to as a state, although technically not such. Its mortality rates, however, are reported with those of the states.

North Carolina rates for 1910 include only municipalities of 1,000 or more.

TABLE III

STATES RANKED BY RATE OF INCREASE IN ALCOHOLISM MORTALITY RATES SINCE 1920

MORE THAN AVERAGE
PERCENTAGE OF INCREASE

1. Maryland
2. Missouri
3. Illinois
4. New York
5. Rhode Island
6. *New Jersey*
7. Minnesota
8. Delaware
9. Connecticut
10. Pennsylvania
11. Wisconsin
12. †Kentucky (1920)

LESS THAN AVERAGE
PERCENTAGE OF INCREASE

13. { Louisiana
14. { Indiana (1918)
15. *Massachusetts
16. *Florida (1919)
17. *Colorado (1916)
18. { California
19. { Michigan (1918)
20. *Mississippi (1909)
21. Ohio (1919)
22. *Nebraska (1917)
23. *Kansas (1881)
24. *District of Columbia (1917)

LESS THAN HALF THE AVERAGE
PERCENTAGE OF INCREASE

25. *Utah (1917)
26. Vermont
27. *South Carolina (1916)
28. *Montana (1919)
29. *Maine (1858)

LESS THAN ONE-THIRD THE AVERAGE
PERCENTAGE OF INCREASE

30. *Virginia (1918)
31. *Oregon (1916)
32. *North Carolina (1909)
33. *New Hampshire, (1918)
34. *Tennessee (1909)
35. *Washington (1916)

*Prohibition states. State prohibition effective with year given in parenthesis. Prohibition states admitted to registration area since 1920 not included in this list.
†State prohibition not effective until six months after national constitutional prohibition.

TABLE IV. REGISTRATION STATES OF 1910, ALCOHOLISM DEATH RATES

1910	1916	1920	1926
Mont. 14.7	Mont. 17.7	*Wash. 2.6	Md. 7.5
Wash. 12.8	R. I. 8.9	*Mont. 1.8	R. I. 7.1
Calif. 8.7	Conn. 8.2	Mass. 1.8	N. Y. 7.0
Conn. 7.7	N. Y. 8.2	*N. H. 1.8	Mass. 6.4
Col. 7.4	Mass. 8.2	*Mich. 1.5	Pa. 6.0
D. C. 6.6	D. C. 7.8	Vt. 1.4	*Mich. 4.8
N. Y. 6.6	N. H. 7.8	R. I. 1.3	
Mass. 6.4	Mich. 7.1	*Me. 1.3	
N. J. 6.0			
R. I. 5.9			
N. H. 5.8			
†R. S. 5.5	R. S. 6.6	R. S. 1.2	R. S. 4.7
	N. J. 6.6	N. Y. 1.2	
	Calif. 6.6	Pa. 1.2	
		*Ohio 1.2	
Minn. 5.1	Ohio 6.3	*Utah. 1.1	N. J. 4.6
Utah 4.8	Penn. 6.0	*D. C. 1.1	Conn. 4.2
Md. 4.5	Wis. 5.6	Calif. 1.0	*Wash. 4.1
Wis. 4.4	Md. 5.5	Conn. 1.0	Minn. 4.0
Pa. 4.1	Utah 5.2	*N. C. 1.0	*Mont. 3.9
Ohio 4.0	Ind. 5.1	N. J. 0.9	*Ohio 3.4
Vt. 3.9	*Me. 5.1	Wis. 0.8	Wis. 3.2
Mich. 3.6	Minn. 4.3	Minn. 0.8	Calif. 3.2
Ind. 3.3	*Col. 3.0	Md. 0.7	*N. H. 3.1
*Me. 2.8	Vt. 2.8	*Col. 0.7	Vt. 3.1
*N. C. 2.8	*Wash. 2.8	*Ind. 0.5	*D. C. 2.7
	*N. C. 1.3		*Utah 2.5
			*Me. 2.5
			*Col. 2.3
			*Ind. 1.8
			*N. C. 1.8

*State prohibition. Table III shows dates at which state laws became effective. See Table II for notes on D. C. and N. C.
†R. S. Alcoholism death rate of registration states of 1919.

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**END OF
TITLE**